

August 1, 2005

HAND DELIVERED

Ms. Elizabeth O'Donnell Executive Director Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

AUG 1 2005

PUBLIC SERVICE COMMISSION

Re: PSC Case No. 2005-00053

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case an original and ten (10) copies of the Petition for Confidential Treatment of Information of East Kentucky Power Cooperative, Inc., regarding the responses to the Staff Supplemental Data Request dated July 22, 2005. One set of pages from these responses and support materials contained designated confidential information is enclosed, along with ten redacted sets of the responses.

Very truly yours,

Charles A. Lile

Senior Corporate Counsel

Enclosures

Cc: Elizabeth E. Blackford, Esq. Michael L. Kurtz, Esq. Brent L. Caldwell, Esq Douglas T. Logsdon, Esq.

### **COMMONWEALTH OF KENTUCKY**

### BEFORE THE PUBLIC SERVICE COMMISSION

PECHVII
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AUG 1 2005

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER	)
COOPERATIVE, INC. FOR A CERTIFICATE OF	)
PUBLIC CONVENIENCE AND NECESSITY, AND A	)
SITE COMPATIBILITY CERTIFICATE, FOR THE	) CASE NO. 2005-00053
CONSTRUCTION OF A 278 MW (NOMINAL)	)
CIRCULATING FLUIDIZED BED COAL FIRED UNIT	)
AND FIVE 90 MW (NOMINAL) COMBUSTION	)
TURBINES IN CLARK COUNTY, KENTUCKY	)

# PETITION FOR CONFIDENTIAL TREATMENT OF INFORMATION

Comes now the Petitioner, East Kentucky Power Cooperative, Inc. ("EKPC") and, pursuant to 807 KAR 5:001 Section 7 and KRS §61.870, requests confidential treatment of the designated information in the responses and attached support information which are hereby filed as directed by the Supplemental Data Request of the Kentucky Public Service Commission (the "Commission") in this case dated July 22, 2005. As grounds for this petition, EKPC states as follows:

1. 807 KAR 5:001 Section 7 authorizes confidential treatment of information submitted to the Commission based on grounds provided in KRS §61.870 et seq. EKPC asserts that the information identified in the abovementioned responses and support information filed in this case are records generally recognized as proprietary and confidential which, if made public, would permit an unfair commercial advantage to competitors of EKPC, as more fully explained

hereinbelow. As such, this information should be granted confidential treatment pursuant to 801 KAR 5:001 Section 7 and KRS §61.878 (1)(c)(1).

2. The designated information consists of documentation of telephone conversations with representatives of other utilities, who agreed to share information about their operating experience with Siemens-Westinghouse V84.3A combustion turbine generator units, on a confidential basis, and certain detailed reports regarding these units which were prepared by the Electric Power Research Institute ("EPRI") and are only available to EPRI members, on a confidential basis. EKPC sought this information as a part of its evaluation of such units in its RFP 2004-1, and agreed to protect the confidentiality of the information, as required by its EPRI membership agreement, and as requested by the responding utility representatives. Due to the necessity of maintaining business relationships with equipment suppliers, utilities will not generally provide candid information to other utilities concerning any problems encountered with generating equipment unless the inquiring party agrees to keep the identity of the responding utility confidential. Access to such EPRI research, and to this informal flow of information between utilities is critical to EKPC, not only for RFP evaluations, but as an effective, cost efficient and rapid way to obtain valuable practical assistance in the event of malfunctions and outages, or for the purpose of optimizing the performance of units or addressing other operational issues, based on the experience of other owners. Failing to protect the confidentiality of the EPRI reports, or failing to protect the identity of the responding utility representatives, would disrupt EKPC's access to such information, with likely adverse impacts on its power production costs. Such power production cost impacts could put EKPC at an unfair disadvantage in efforts to market surplus energy in competition with other utilities, power marketers and other entities which compete with EKPC in the bulk power market.

- 3. EKPC has protected the confidentiality of the subject information, which contains information known only by EKPC, its RFP consultant, EnerVision, Inc., EPRI, and the specific responding utilities, and has restricted access to this information to only EnerVision representatives and EKPC employees with a need to use it for the purposes of this case. One unredacted copy of the confidential pages of the subject responses and support materials, along with 10 redacted copies of the responses and support materials, are included with the filing of this Petition, pursuant to 807 KAR 5:001 Section 7.
- 4. The subject information is entitled to confidential treatment pursuant to 807 KAR 5:001 Section 7 and KRS §61.878(1)(c)(1) as information generally recognized as confidential and proprietary which would permit an unfair commercial advantage to competitors of EKPC in the surplus power market if disclosed, as discussed hereinabove. The information is also entitled to confidential treatment pursuant to KRS §61.878(1)(c)2(c) as confidential information maintained in conjunction with the regulation of a commercial enterprise and disclosed to an agency on a confidential basis.

WHEREFORE, EKPC respectfully requests the Commission to grant confidential treatment to the subject information and deny public disclosure of said information.

Respectfully submitted,

DALE W. HENLEY

CHARLES A. LILE

P. O. BOX 707

WINCHESTER, KY 40392-0707

(859) 744-4812

### **CERTIFICATE OF SERVICE**

This is to certify that an original and ten copies of this Petition for Confidential

Treatment of Information in the above-styled case were delivered to the Elizabeth O'Donnell, Executive

Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40602, and copies

were mailed to parties on the service list in this case, this 1<sup>st</sup> day of August, 2005.

CHARLES A. LILE

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(053Smith1SuppDR-confidtreat)



August 1, 2005

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Ms. Elizabeth O'Donnell Executive Director Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

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TIBLIC DEEVICE

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Enclosures

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COOPERATIVE, INC. FOR A CERTIFICATE OF	)
PUBLIC CONVENIENCE AND NECESSITY, AND A	)
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APPLICATION OF EAST KENTUCKY	)
POWER COOPERATIVE, INC. FOR	)
A CERTIFICATE OF PUBLIC	)
CONVENIENCE AND NECESSITY,	)
AND A SITE COMPATIBILITY CERTIFICATE,	) CASE NO. 2005-00053
FOR THE CONSTRUCTION OF A	)
278 MW (NOMINAL) CIRCULATING	)
FLUIDIZED BED COAL FIRED UNIT AND	)
FIVE 90 MW (NOMINAL) COMBUSTION	)
TURBINES IN CLARK COUNTY, KENTUCKY	)

# COMMISSION STAFF'S SUPPLEMENTAL DATA REQUEST TO EAST KENTUCKY POWER COOPERATIVE, INC.

Pursuant to 807 KAR 5:001, Commission Staff requests that East Kentucky Power Cooperative, Inc. ("East Kentucky Power") file the original and 5 copies of the following information with the Commission within 10 days of the date of this request, with a copy to all parties of record. Each copy of the information requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure its legibility. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request.

- 1. Refer to the affidavit of Gregory J. Snyder ("Snyder Affidavit") attached to the motion to intervene filed by Siemens-Westinghouse Power Corporation ("Siemens-Westinghouse"). To the extent that the Snyder Affidavit contains facts and allegations that differ from those set forth by East Kentucky Power in its response to Item No. 7 of the March 18, 2005 data request, provide detailed explanations for each such difference.
- Refer to East Kentucky Power's response to Item No. 7 of the March 18,
   2005 data request.
- a. Provide copies of all analyses, reports, and other documentation to support the statements and conclusions therein that there are reliability, operational, and maintenance issues with the V84.3A units.
- b. Provide copies of the news article that discusses the experience of Calpine Corp. as referenced in the last paragraph of the data response.
- 3. Provide the following information regarding the General Electric LMS 100 combustion turbines:
- a. The date the units were first delivered to a buyer for commercial operation.
  - b. The number of units in commercial operation.
  - c. The reliability, operational, and maintenance history of the units.
- d. The actual efficiency rate achieved by the units in commercial operation.
- 4. Has Siemens-Westinghouse stopped production of the V84.3A units? If yes, when did production stop?

- 5. Is Siemens-Westinghouse currently offering the V84.3A units for sale?
- 6. Did the Siemens-Westinghouse bid propose to construct V84.3A units specifically for East Kentucky Power or furnish existing units from inventory?

Beth O'Donnell

**Executive Director** 

**Public Service Commission** 

P. O. Box 615

Frankfort, Kentucky 40602

DATED: <u>July 22, 2005</u>

cc: Parties of Record

### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

### In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, AND A SITE COMPATIBILITY CERTIFICATE, FOR THE CONSTRUCTION OF A 278 MW (NOMINAL) CIRCULATING FLUIDIZED BED COAL FIRED UNIT AND FIVE 90 MW (NOMINAL) COMBUSTION TURBINES IN CLARK COUNTY, KENTUCKY

CASE NO. 2005-00053

RESPONSES TO COMMISSION STAFF SUPPLEMENTAL REQUEST DATED JULY 22, 2005

# EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2005-00053 INITIAL INFORMATION REQUEST RESPONSE

COMMISSION STAFF'S REQUEST DATED 7/22/05 REQUEST 1

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 1.** Refer to the affidavit of Gregory J. Snyder ("Snyder Affidavit") attached to the motion to intervene filed by Siemens-Westinghouse Power Corporation ("Siemens-Westinghouse"). To the extent that the Snyder Affidavit contains facts and allegations that differ from those set forth by East Kentucky Power in its response to Item No. 7 of the March 18, 2005 data request, provide detailed explanation for each such difference.

### **RESPONSE 1.**

Key to Utilities (CONFIDENTIAL):

Utility A:

Utility B:

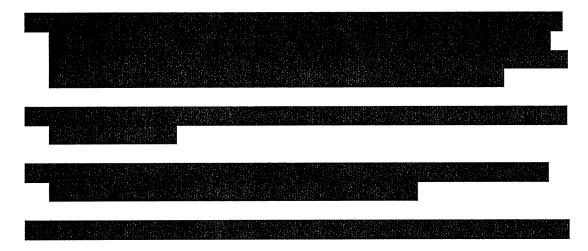
Utility C:

Utility D:

Utility E:

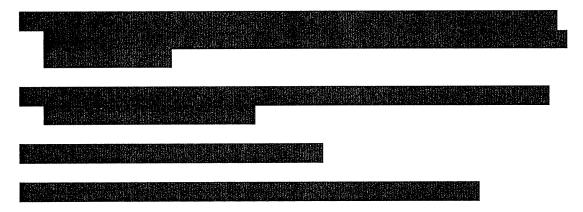
Utility F:

The Snyder Affidavit asserts that "the tile design has a good operating history." The affidavit did not refute the statement that EKPC included in its response to Item No. 7 of the March 18, 2005 data request; instead the affidavit discussed inspection intervals and the availability of a long-term service contract. From discussions with representatives from other utilities using or knowledgeable about the V84.3A units, EKPC made the following discoveries:

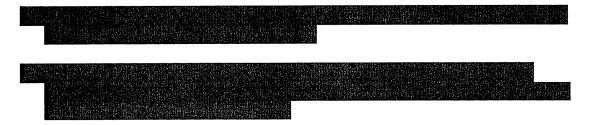


It is not the reliability of the warranties or the long-term service contract offered by Siemens-Westinghouse that concerns EKPC, it is the reliability of the units themselves and the ability to dispatch them when necessary.

The Snyder Affidavit directly contested EKPC's concern with generator problems involving failure of cooling blades. Though the affidavit stated the "generator blades do not have a history of operating or reliability issues," EKPC has gathered information from other utilities that produced the following observations:



EKPC's concerns about humming and vibration problems arose after discussions with other utilities that have experienced issues and capacity derates due to humming.



Though the Snyder Affidavit contends that the humming/vibration issues have been solved, however, the need for a dynamic monitoring system that "maintains engine operation away from harmful conditions" by shedding load does not appear to be very advantageous when the units' sole purpose will be to fulfill the peaking requirements of EKPC.

The Snyder Affidavit states that upon commissioning, the unit "typically" does not need modification. However,

In addition,

The Siemens V84.3A cannot meet the current Best Available Control Technology ("BACT") NOx limits. The BACT limits are set by EPA. The V84.3A machine would require the addition of an SCR to meet the current NOx limits. The Siemens' proposal did not include an option for an SCR.

# EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2005-00053 INITIAL INFORMATION REQUEST RESPONSE

**COMMISSION STAFF'S REQUEST DATED 7/22/05** 

COMMISSION STAFF'S REQUEST DATED 7/22/05

**REQUEST 2** 

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 2.** Refer to East Kentucky Power's response to Item No. 7 of the March 18, 2005 data request.

**REQUEST 2a.** Provide copies of all analyses, reports, and other documentation to support the statements and conclusions therein that there are reliability, operational, and maintenance issues with the V84.3A units.

### RESPONSE 2a.

EKPC relied on technical reports produced by the Electric Power Research Institute (EPRI) of Palo Alto, California, and conference calls with individuals from various utilities knowledgeable about the units to support the statements and conclusions regarding the V84.3A units. One report was entitled "Design Evolution, Durability, and Reliability of Siemens Heavy Duty Combustion Turbines," (Technical Report No. 1004228) dated March 2004, and prepared by EPRI. The other report was entitled "Testing and Performance of the Siemens V84.3A Gas Turbine in Peaking Service at Hawthorn Station of Kansas City Power & Light Company," (Technical Report No. 111645) dated December 1998, and prepared by EPRI. Copies of these reports are included with this filing. In addition, six conference calls were held to discuss the actual

experience of those knowledgeable of the units. Response 1 above summarizes the gist of those conference calls. Copies of notes from the conference calls are included as Attachment I.

**REQUEST 2b.** Provide copies of the news article that discusses the experience of Calpine Corp. as referenced in the last paragraph the data response.

**RESPONSE 2b.** Following is the news article regarding Calpine Corporation's experience with Siemens' Units.

# UPDATE: Calpine: Equipment Failures From Siemens Turbines

### **DOW JONES NEWSWIRES**

February 24, 2005 4:18 p.m.

SAN FRANCISCO -- Calpine Corp.'s (CPN) unexpected costs due to equipment failure in the fourth quarter were related almost entirely to turbines purchased from Siemens AG (SI), a Calpine executive said Thursday in a conference call with Wall Street analysts.

Calpine reported a fourth-quarter net loss of \$172.8 million, compared with net income of \$119.6 million in the final quarter of 2003. The company, which has built its huge fleet of natural gas-fired power plants in the U.S. over the past several years, said equipment-failure costs of \$45.3 million were a significant part of the downturn in results. The fourth-quarter loss of 39 cents a share surprised Wall Street analysts, who had been expecting a loss of 14 cents on average, according to First Call.

The problems have been related to Siemens turbines, said Thomas R. Mason, president of subsidiary Calpine Power Co. He pointed out that the company is having little trouble with its equipment from General Electric (GE), the world's other major maker of power-plant turbines. "All of these have been Siemens-related on combustion gas turbines and one on a steam turbine. We've had some issues with GE, but those are minor compared with Siemens," Mason said.

Siemens said that it has honored all of its contractual and warranty obligations with Calpine. "Since we are not involved in the day-to-day operations of their power plants, it would not be appropriate to comment further on the performance of their equipment," Siemens spokeswoman Paula Davis said.

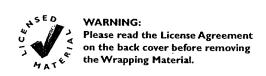
During the quarter, Calpine's power plants rose to a new height in availability, but that was due to improvements in performance of its GE-turbine plants while availability of its Siemens generators was flat, Mason said. Calpine is in discussions with the equipment manufacturers, and it is trying to deduce the root causes of the failures to see how some of the costs may be paid for by equipment manufacturers and insurers, said Mason.

Improving gross profits in the U.S. for generating electricity from natural gas didn't overcome Calpine's increased costs for interest payments, the equipment failures and cancellations of orders for turbines and other equipment, said Chief Financial Officer Bob Kelly. Calpine's stock was trading around \$3.27 a share late Thursday afternoon, down 16 cents, or 4.7%.



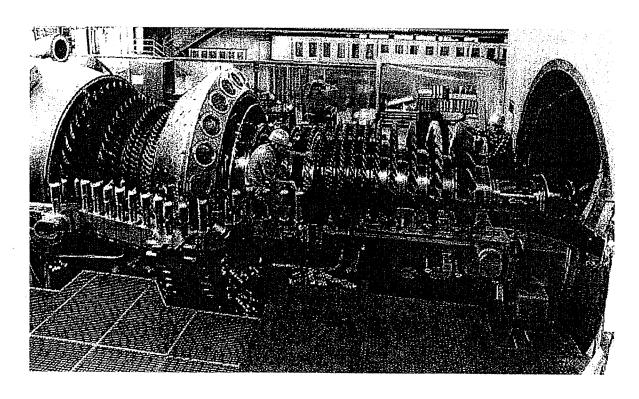
Design Evolution, Durability, and Reliability of Siemens Heavy Duty Combustion Turbines

Pedigree Matrices, Volume 4



Technical Report

## REDACTED



Testing and Peformance of the Siemens V84.3A Gas Turbine in Peaking Service at Hawthorn Station of Kansas City Power & Light Company

TR-111645

Interim Report, December 1998



Project Manager J. Scheibel

## PSC Request 2 Attachment I

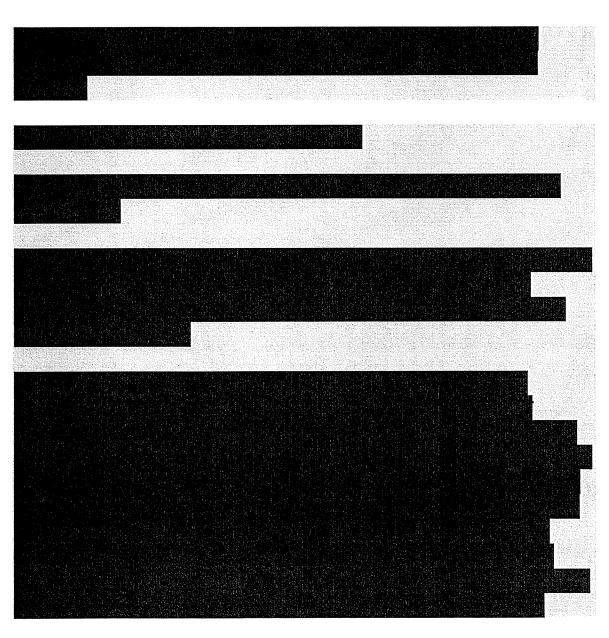
Phone Conference on Siemens Westinghouse V84.3A CT's

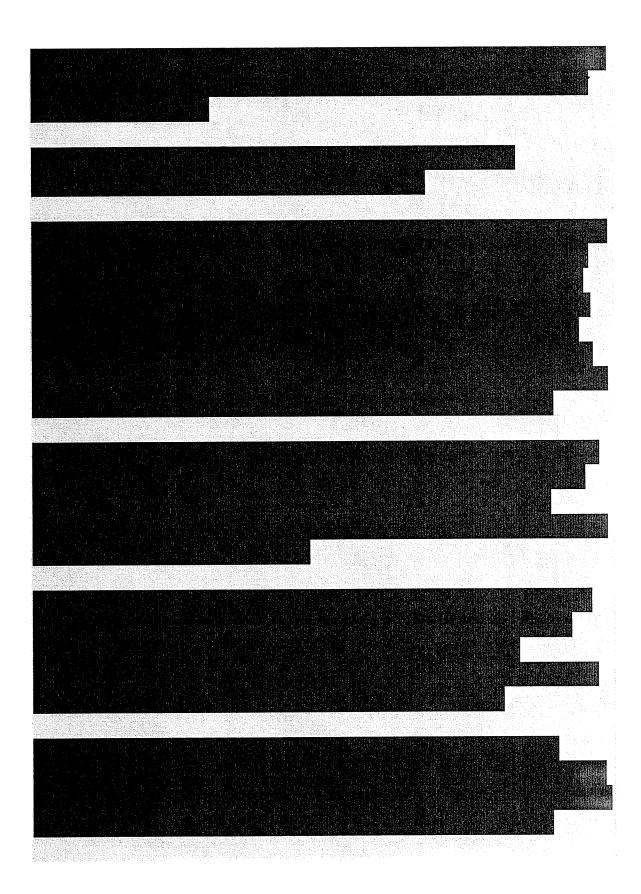
EKPC and ("Utility A")

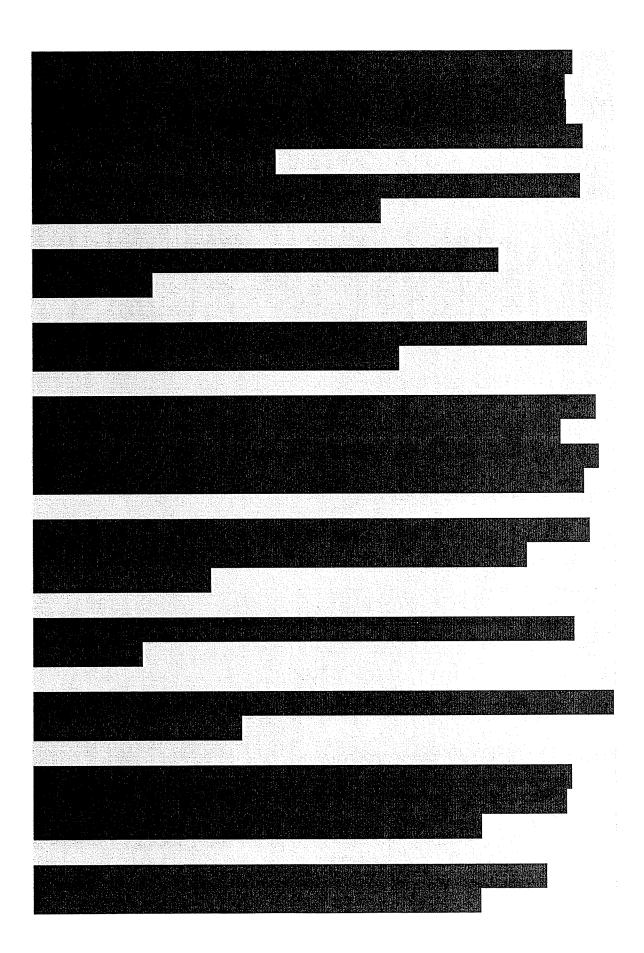
December 9, 2004 3:30pm EST

EKPC: Gary Davidson, TC Christopher, Bob Hughes

**EnerVision: Josh Warmack** 



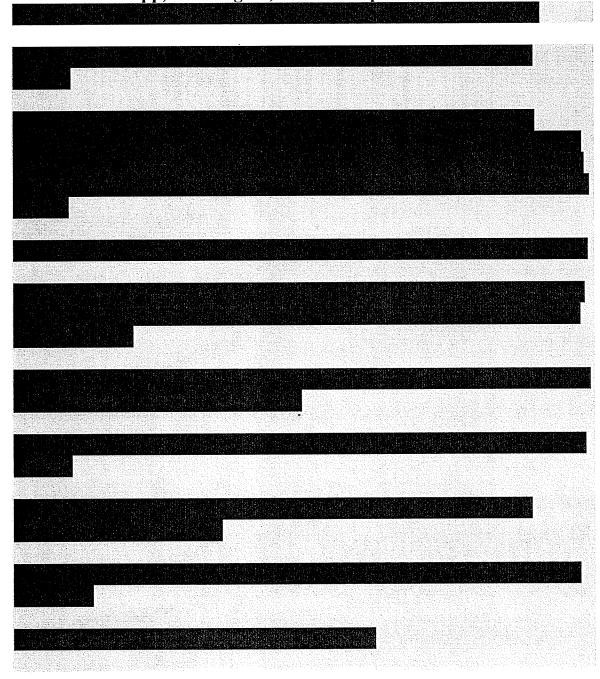


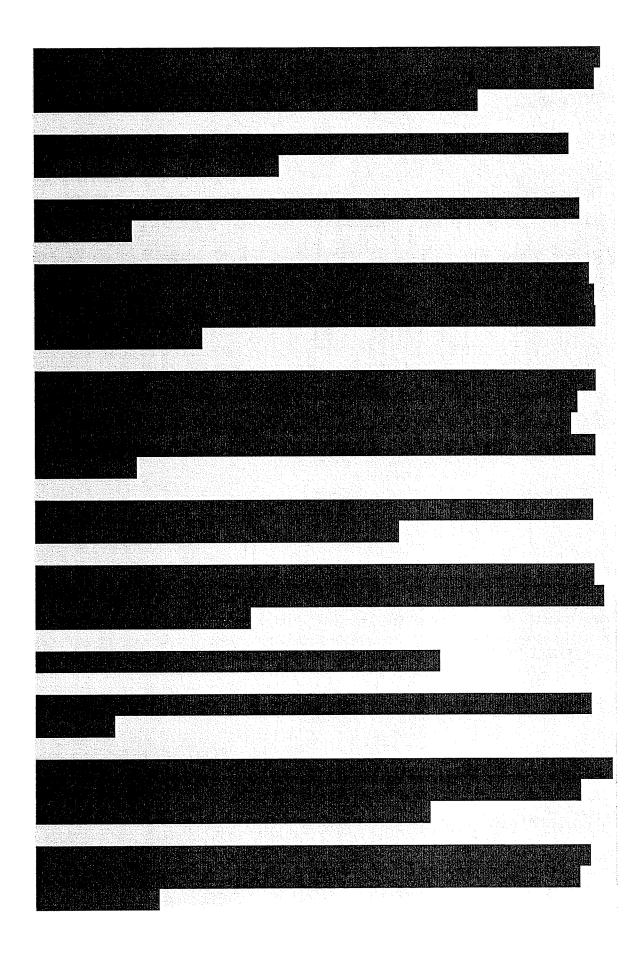


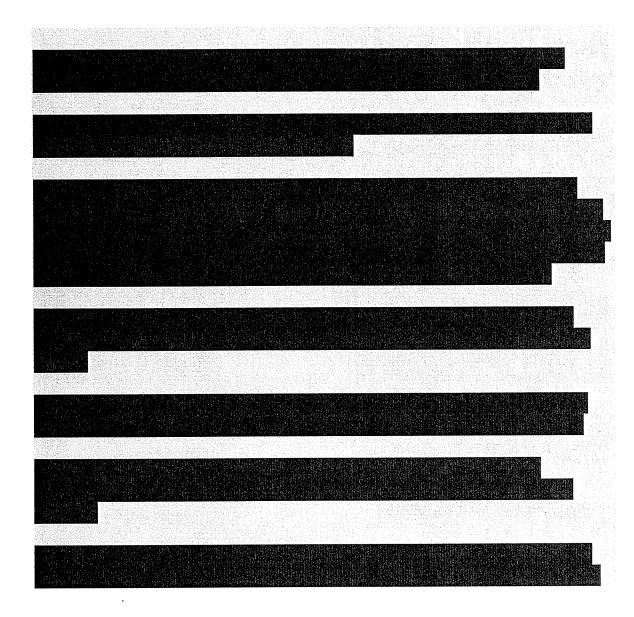
Phone Conference on Siemens Westinghouse's V84.3A CT's EKPC and ("Utility B")

October 29, 2004

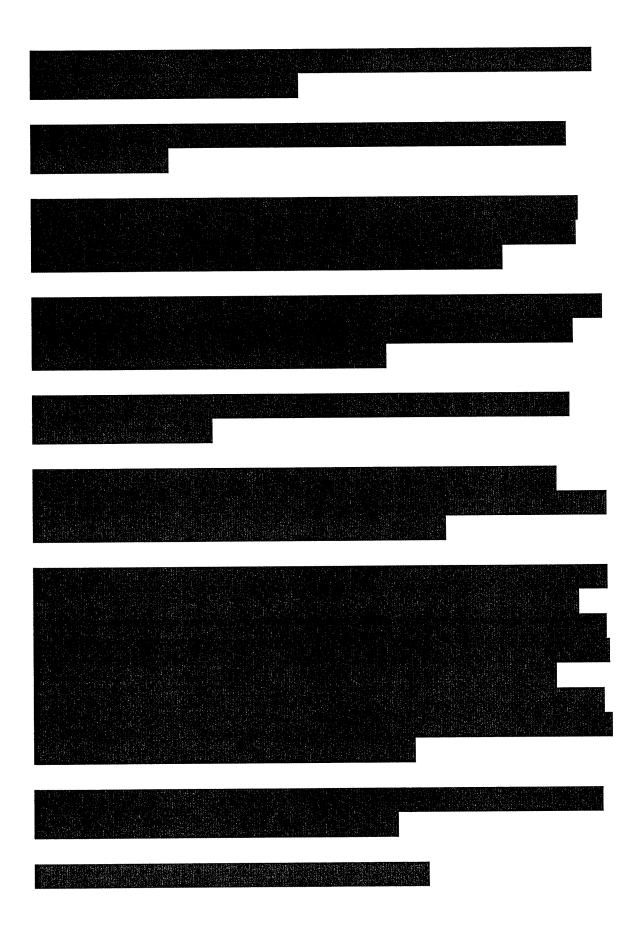
EKPC: Jim Shipp, Bob Hughes, TC Christopher

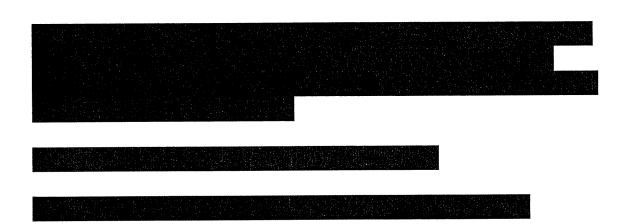






Phone Conference on Siemens Westinghouse's V84.2 CT's	
EKPC and ("Utility C")	
December 10, 2004 10:30am EST	
EKPC: Gary Davidson, TC Christopher	
EnerVision: no representative was available	

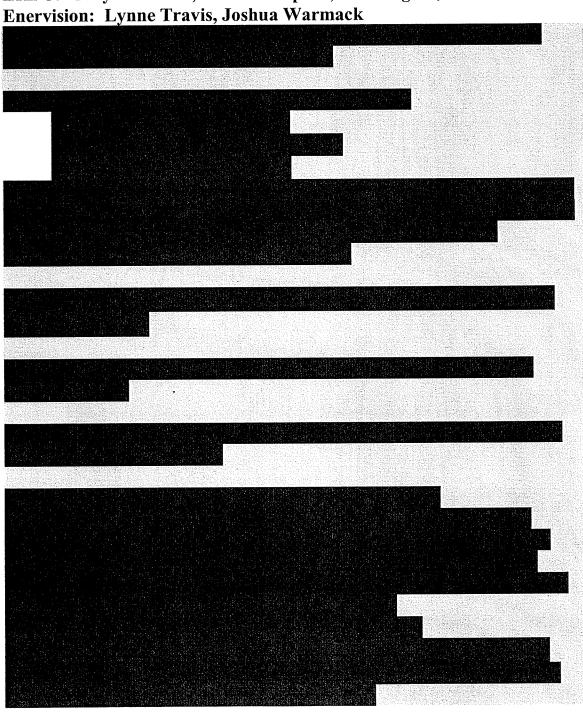


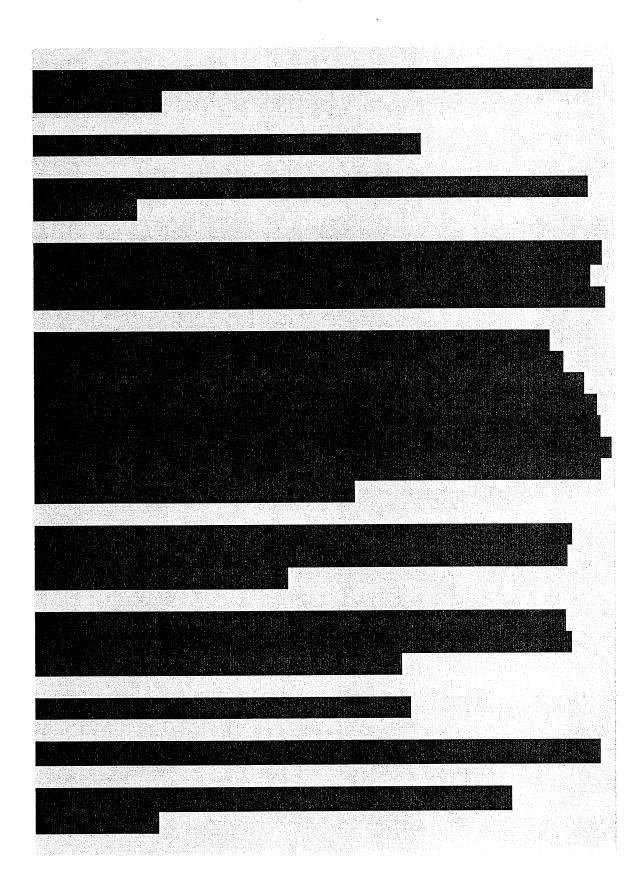


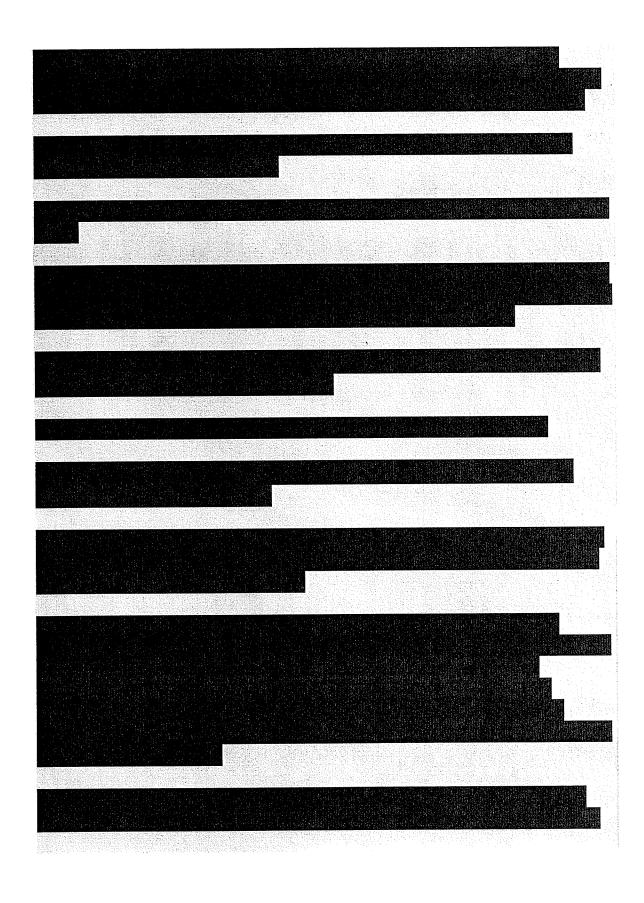
Phone Conference Notes on Siemens-Westinghouse's V84.3A2 CT's EKPC and Cutility D")

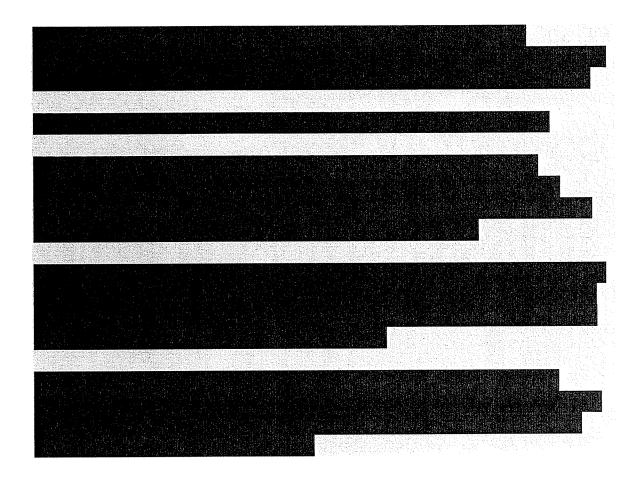
December 6, 2004

EKPC: Gary Davidson, TC Christopher, Bob Hughes, Tom Edwards









### CONFIDENTIAL

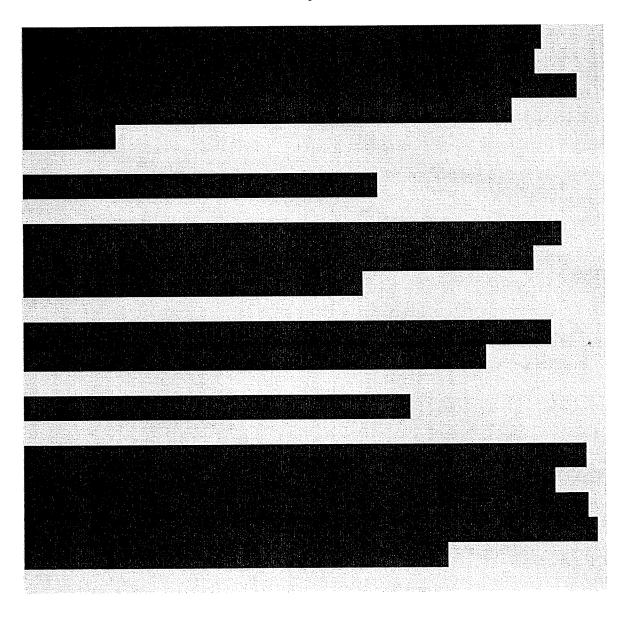
Phone Conference on Siemens Westinghouse's V84.3A CT's

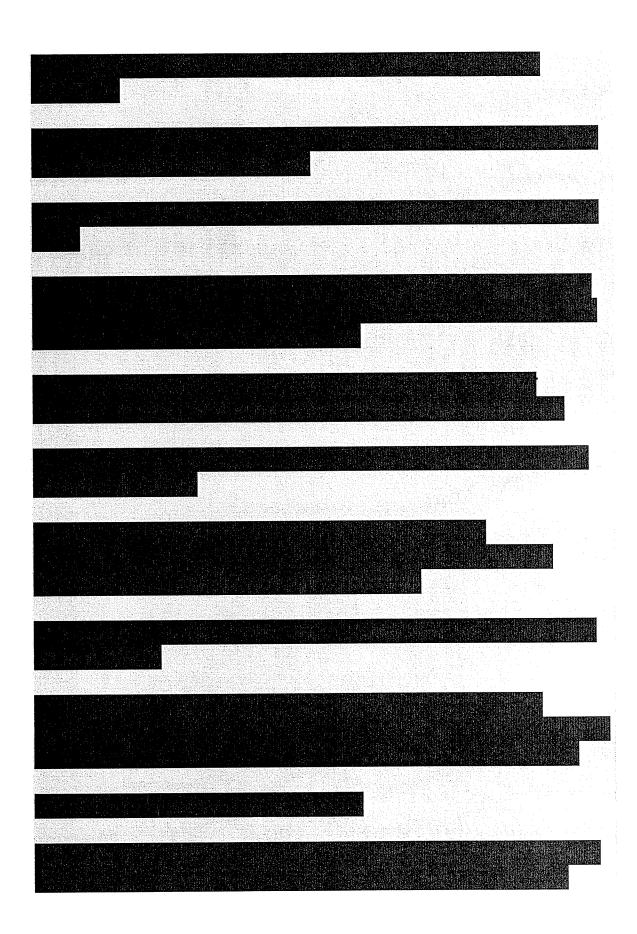
EKPC and ("Utility E")

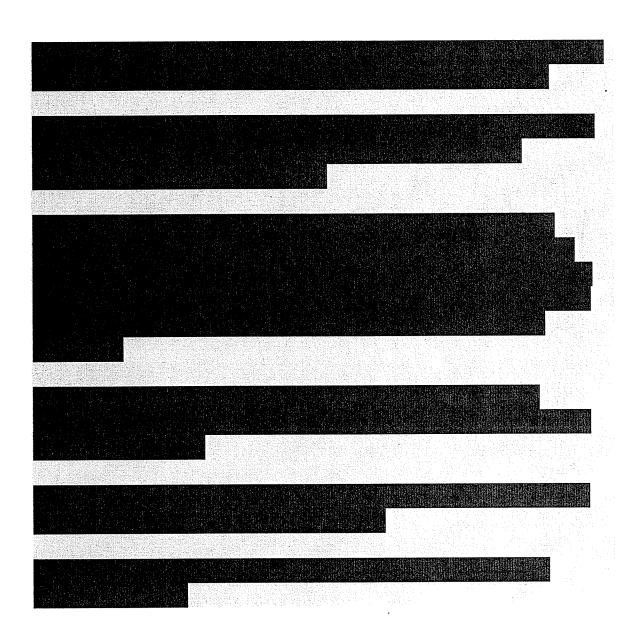
December 13, 2004 11:00am EST

EKPC: TC Christopher, Tom Edwards, Earl Ferguson

**EnerVision: Josh Warmack, Lynne Travis** 







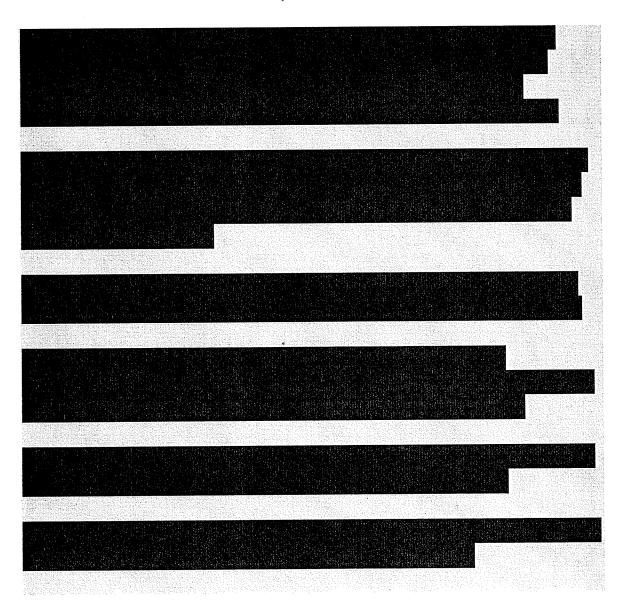
### CONFIDENTIAL

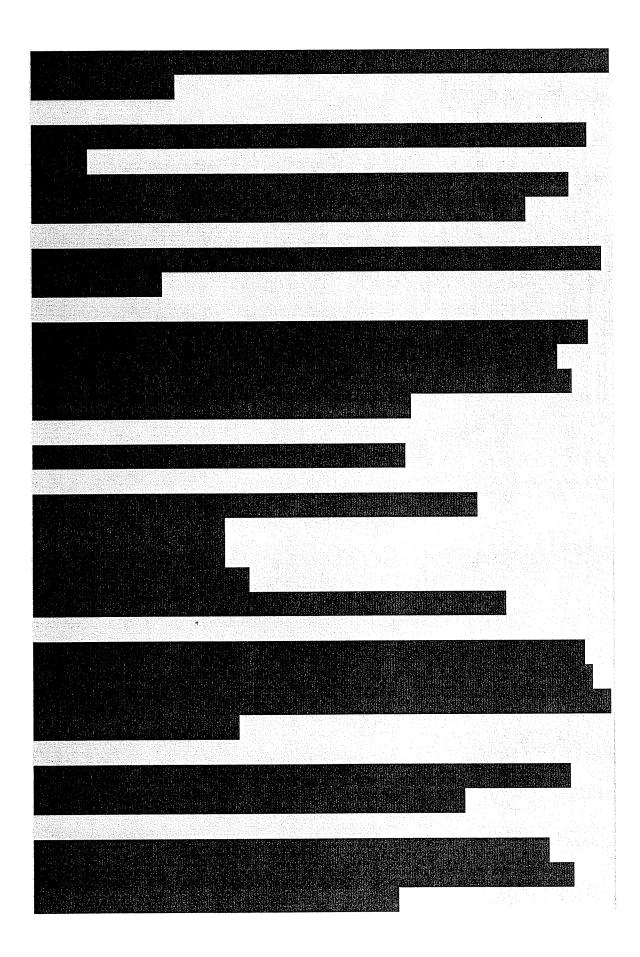
Phone Conference on Siemens Westinghouse's V84.3A CT's EKPC and ("Utility F")

**December 22, 2004** 

**EKPC: TC Christopher** 

**EnerVision: Josh Warmack, Consultant** 





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**COMMISSION STAFF'S REQUEST DATED 7/22/05** 

COMMISSION STAFF'S REQUEST DATED 7/22/05 REQUEST 3

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 3.** Provide the following information regarding the General Electric LMS 100 combustion turbines.

**REQUEST 3a.** The date the units were first delivered to a buyer for commercial operation.

#### RESPONSE 3a.

No LMS100 units have been delivered to date by General Electric ("GE"). However, the following information has been provided to EKPC by GE regarding the performance of the technology involved in the LMS100 units:

The GE LMS100 gas turbine generator is a newly introduced unit using current technology in a new, innovative way. The LMS100 combines technology from GE's heavy duty frame engines and its aeroderivative technology. This application of proven technology, combined with the use of a compressor intercooler, results in a unit with unprecedented efficiency and operating flexibility while minimizing technology risk.

The inlet and the low pressure compressor (LPC) are derived from the GE MS6001FA, a nominal 70 MW heavy duty gas turbine with years of successful service. The core engine, consisting of the high pressure compressor (HPC), combustor and high pressure

turbine (HPT) are based on the CF6-80C2 and CF6-80E1 commercial aircraft engines. These engines have seen years of successful operation on various wide-body commercial aircraft. These engines are also the technology base for the hugely successful LM6000 gas turbine generator. The intermediate pressure turbine (IPT) and the power turbine (PT) are designed specifically for the LMS100, using current aeroderivative technology. Finally, the exhaust frame and aft drive shaft are based on heavy-duty frame gas turbine exhaust design.

The LMS100 is undergoing extensive testing. The core engine completed the test cell phase of this test program in December 2004. The tests confirmed aeromechanics, mechanical design and variable geometry optimization. During the test, the engine ran for 66 hours and had over 70 starts. 100% start reliability was achieved. A complete LMS100 power plant is being constructed at the GE test facility in Houston in order to conduct a string test of the entire system. This test began July 19, 2005 with the first fire of this unit, which went fine. Over the next 3 to 4 months, the unit will be extensively tested to demonstrate output, heat rate, emissions and other operating parameters. Data will be taken from approximately 3,500 sensors attached to the unit for purposes of the test.

The first unit has been sold to Basin Electric Power Cooperative of Bismarck, ND. Civil construction work has begun on the site in Groton, SD. The gas turbine unit will be shipped to the site in the Fall of 2005. Commercial operation of the unit is scheduled for June 2006. East Kentucky Power Cooperative has, subject to Kentucky-PSC approval, ordered five LMS100 units to be installed for commercial operation beginning in April 2007, with the final units in operation in April 2008.

**REQUEST 3b.** The number of units in commercial operation.

#### RESPONSE 3b.

No units are in commercial operation as of this date. However, GE has provided the following information to EKPC:

The first unit to go into commercial operation will be the Basin Electric unit in June 2006. Subject to Kentucky-PSC approval, the next five units will go into commercial operation for East Kentucky Power Cooperative between April 2007 and April 2008. The LMS100 has been proposed in numerous, active Requests for Proposals (RFP) and Requests for Offers (RFO) from several investor owned utilities. In the near term, GE expects these activities to result in additional orders for the LMS100.

**REQUEST 3c.** The reliability, operational, and maintenance history of the units.

#### RESPONSE 3c.

Because no units are in commercial operation as of this date, there is no reliability, operational or maintenance history of these units yet. However, GE has provided the following information to EKPC:

The reliability of the LMS100 will be determined primarily by the performance of its aeroderivative core engine. Because of the similarities in design to the LM6000, the LMS100 reliability is expected to mirror the LM6000 experience. The reliability (availability, excluding scheduled maintenance) of the LM6000 fleet has been in excess of 98 percent, as measured by an independent survey company.

The LMS100 has modular design, similar to the LM6000. This allows for fast replacement of components without the need for in-the-field overhaul work. The core engine and the power turbine can be swapped out in 24 to 48 hours. Lease, or spare, components for both the core engine and power turbine will be available to LMS100 owners. The LMS100 will have the same major maintenance schedule as the LM6000: hot-section replacement at 25,000 operating hours via on-site exchange and engine

overhaul at 50,000 operating hours. A lease engine can be put in place during the engine overhaul.

**REQUEST 3d.** The actual efficiency rate achieved by the units in commercial operation.

#### RESPONSE 3d.

Because there are no units in commercial operation as of this date, the actual efficiency rates these units can achieve is not available. However, GE has provided the following information to EKPC:

GE expects that the LMS100 will be the most efficient gas turbine generator on the market. Full load efficiency at ISO conditions will be approximately 44% and part load efficiency will be approximately 38% at 50% load. This part load efficiency is better than some gas turbines at full load. Unit testing to date indicates that the design efficiencies will be met in the production units. GE has guaranteed to East Kentucky that its LMS100 units will meet specified output and heat rate performance. In the unlikely event that the performance guarantees are not met, substantial liquidated damages will apply.

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COMMISSION STAFF'S REQUEST DATED 7/22/05 REQUEST 4

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 4.** Has Siemens-Westinghouse stopped production of the V84.3A units? If yes, when did production stop?

### RESPONSE 4.

It is EKPC's understanding that Siemens-Westinghouse has the manufacturing facilities to produce the V84.3A2 units, but no units are being built because there are no orders for them. To the best of EKPC's knowledge, it is believed that the three units that were offered to EKPC were the last of the V84.3A2 units manufactured by Siemens. It is EKPC's understanding that those units have been sold to other parties and are no longer available to EKPC.

COMMISSION STAFF'S REQUEST DATED 7/22/05 REQUEST 5

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 5.** Is Siemens-Westinghouse currently offering the V84.3A units for sale?

### RESPONSE 5.

EKPC believes the units proposed to EKPC have been sold to other parties and that no additional units are being manufactured because the CT market has been depressed over the last few years. It is EKPC's understanding that the V84 series of units (60Hz machines) are no longer being marketed in the United States, but instead the V94 series of units (50 Hz machines) are being offered in Europe. EKPC has heard that Siemens is "pushing" the Westhinghouse 501F units in the United States now.

COMMISSION STAFF'S REQUEST DATED 7/22/05 REQUEST 6

**RESPONSIBLE PARTY: David Eames** 

**REQUEST 6.** Did the Siemens-Westinghouse bid propose to construct V84.3A units specifically for East Kentucky Power or furnish existing units from inventory?

### RESPONSE 6.

The three units offered to EKPC had already been manufactured and had been in storage for some period of time.